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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,882	07/18/2003	Evan E. Koslow	KT-P-025US	2756
22891	7590	04/26/2006	EXAMINER	
DELIO & PETERSON 121 WHITNEY AVENUE NEW HAVEN, CT 06510			MENON, KRISHNAN S	
			ART UNIT	PAPER NUMBER

1723

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/622,882

Applicant(s)

KOSLOW, EVAN E.

Examiner

Krishnan S. Menon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8-11, 14-24, 26-29, 31-37, 39-42, 44 and 75-108 is/are pending in the application.
- 4a) Of the above claim(s) See Office Action is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 16, 21, 85-89, 93-97, 100-105 and 108 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Claims 8-11, 14-24, 26-29, 31-37, 39-42, 44 and 75-108 are pending of which 10,11,14,15,17-19,22-24,26-29, 31-37, 39-42, 44, 75-84, 90,91,98,99,106 and 107 are withdrawn from consideration.

### ***Election/Restrictions***

Newly submitted claims 75-84, 90,91,98,99,106 and 107 are directed to an invention that is independent or distinct from the invention originally claimed, or originally elected, for the following reasons: claims 75-84 are generic claims to fibrillated fiber sheets not originally presented. Claims 90,91,98,99,106 and 107 are directed at non-elected species.

Since applicant has received an action on the merits for the originally presented, or the elected invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 75-84, 90,91,98,99,106 and 107 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8, 9, 16, 20, 93-97 and 100 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 8 recites a sheet comprising fibrillated lyocell fibers with biological interception agent on a portion, wherein the sheet is capable of being carbonized. There is no support in the specification or the claims as originally filed for this limitation. Support is found only for the microbiological agent on carbonized fiber sheets. This claim does not read the sheet as being carbonized.

Claims 8, 9, 16, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim recites a sheet that is capable of being carbonized, but not actually carbonized. The specification discloses carbonized sheets having the microbiological agent. If one reads the claims in the light of the specification and assumes that the sheet is to be carbonized as in claim 9, the microbiological agents would decompose or be destroyed, resulting in a sheet not useful for its intended purpose.

***Double Patenting***

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

(1) Claims 8,16,20,93-97, and 100 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims 5,6,7,11,20,41 and 43 of copending Application No. 10/640,889, and claims 1-25 of copending Application No. 10/666,878. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims recite substantially same subject matter, that is, fibrillated fiber sheets with an anti-microbial agent.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

(2) Claims 8 and 16 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,872,311.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim of the patent recites the limitations of the instant claims.

(3) Claim 16 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 8. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim 16 does not further limit claim 8.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 9, 16, 21, 85-89, 93-97, 100 -105 and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giglia (US 4,929,502) in view of Arons et al (US 4,217,386) and Sawan et al (US 5,681,468).

Giglia teaches a sheet material of fibrillated cellulosic materials such as cellulose acetates, rayon, hemp, cotton, etc., with Canadian Standard Freeness less than 200, or 50 or 25 (see abstract, column 3 line 45 – column 4 line 10, column 6 lines 57-66).

Giglia also teaches having carbon fibers in the sheet, which has diameters less than 250 nm (see column 6 lines 18-56: making of carbon fibers is well known, diameter between 0.1  $\mu\text{m}$  (100 nm) and 500  $\mu\text{m}$ , carbon fibers made from cellulosic materials,

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etc.), which is as claimed. Please note that "fibrillated" and "carbonizing", "heating or activation at 600 or 875C", etc., are part of the process of making, and are not patentable. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re *Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Claim limitations such as 'capable of carbonizing' are not patentable limitations. The reference material is capable of such carbonizing.

According to Arons, Carbonizing the sheet to obtain activated carbon in the sheet, and use of rayon as the precursor fabric are well known. See abstract, column 3 lines 1-13, column 4 lines 10-17). It would be obvious to one of ordinary skill in the art at the time of invention to use the well-known teaching also for the activated carbon sheet, particularly as in claim 9, for such applications as chemical protective clothing, as taught by Giglia.

Giglia does not teach having a microbial interception enhancing agent on selected fibers. Sawan teaches a liquid dispenser with a sterile filter wherein the filter has at least a partial coating of a microbial interception enhancing agent, which is a metal coating or a metal -amine complex. See column 3 lines 39-55, column 10 lines 9-14). It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Sawan in the teaching of Giglia to have a filter material with

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antimicrobial characteristics as taught by Swan for protective coating and filtering applications as taught by Giglia (see column 1 lines 29-35).

### ***Response to Arguments***

Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'KS Menon', is positioned above the printed name.

Krishnan S. Menon  
Patent Examiner  
4/24/05